Restoration of Elective Neurosurgery

Updated 23 April 2020

The Neurosurgical Society of Australasia has developed these guidelines to assist surgeons in the restoration of elective neurosurgery during the COVID-19 crisis.

The Minister of Health, The Hon. Greg Hunt announced on Tuesday 21 April, the easing of elective surgery restrictions imposed on the 26 March 2020. This will begin on 27 April 2020.

Public Health data shows that the prevalence of the SARS-CoV-2 (the virus strain that causes COVID-19), in the Australian community at present is less than 6 per 100,000 of population (as of 23 April 2020). The advice from the office of the Chief Medical Officer suggests that these are very low levels and that using triage symptoms to assess patients will very accurately predict the ability to identify a patient with COVID-19 disease. The probability of an asymptomatic patient having COVID-19 is extremely low.

Given the current low prevalence of disease, the office of the Chief Medical Officer has made the following recommendations:

- Triaging for COVID-19 symptoms is of most importance.
- At present there is no recommendation to conduct COVID-19 testing preoperatively in patients with no triage symptoms of COVID-19.
- In asymptomatic patients, standard universal precautions and a standard surgical mask worn well with careful donning and doffing techniques is sufficient for all procedures.
- A patient with any symptoms of COVID-19 should have their surgery deferred and be tested for COVID 19. In an emergent situation, the patient should be treated with full airbourne precautions.
- Current evidence suggests that viral load in aerosol generating procedures is low and droplet precautions with standard surgical masks is sufficient (including endoscopic and anterior skull base procedures).
- COVID-19 positive patients should have surgery deferred until they recover from the disease.
- COVID-19 positive patients having aerosol generating procedures should have maximal PPEs, which
 include N95 masks and eye protection and PAPR where available and staff are trained and supervised in
 their use.

The Neurosurgical Society of Australasia (NSA) in conjunction with the Australian Society of Otolaryngology- Head and Neck Surgery (ASOHNS) encourages members to consider either innovation or modification of techniques to minimise aerosol exposure during pituitary and sinus surgery. Advice from international experience is regularly provided including a 2 microscope drape method to reduce aerosolization in mastoid surgery (from ENT UK). Drilling should be minimised in anterior skull base procedures. We are advised the risk to health professionals in pituitary and anterior skull base surgery in Australia is low and could proceed with the above recommendations.

The restoration of elective surgery is to be reviewed in 2 weeks and again in 4 weeks. Clinical decisions should focus on procedures representing low risk, high value care. In addition:

- Selection of patients who are at low risk of post-operative deterioration should be based on ASA category 1 and 2.
- Patients requiring planned ventilation should be avoided unless they are urgent.
- Decisions should be based on equity, safety and urgency.
- Physical distancing should be applied in the lead up and management of surgery.
- Activity volumes will be monitored by the Government through the MBS item numbers.
- Operating lists not be overbooked.

Category one and two and some category three patients are approved for the beginning of the restoration of elective surgery commencing from 27 April 2020 in Australia. Children whose procedures have exceeded clinical wait times in all categories are also approved.

As guidance, the NSA considers most of neurosurgery is emergency, category one or two as previously communicated in the NSA National Elective Surgery Urgency Categorisation guidelines available here: https://www.dropbox.com/s/h4jijx8679v4a1w/DOC%202020%20COVID-19%20Elective%20Surgery.pdf?dl=0

Category one has the potential to deteriorate quickly to the point where it may become an emergency and admission is ideal within thirty days.

Category two causes pain, dysfunction or disability and is unlikely to deteriorate quickly or become and emergency. Admission is ideal within 90 days.

Category three causes pain, dysfunction or disability but is unlikely to deteriorate quickly and does not have the potential to become an emergency.

Some examples of category three patients which may be considered for surgery include:

- Peripheral nerve stimulator
- Spinal cord stimulator
- Chronic minimally disabling radiculopathy without progression
- Chronic non progressive minimally disabling peripheral nerve compression
- Cranioplasty

As previously stated, clinical decisions should focus on low risk, high value care and selection of patients who are at low risk of postoperative deterioration based on ASA category one and two. This is ultimately a clinical decision left at the discretion of the treating surgeon.